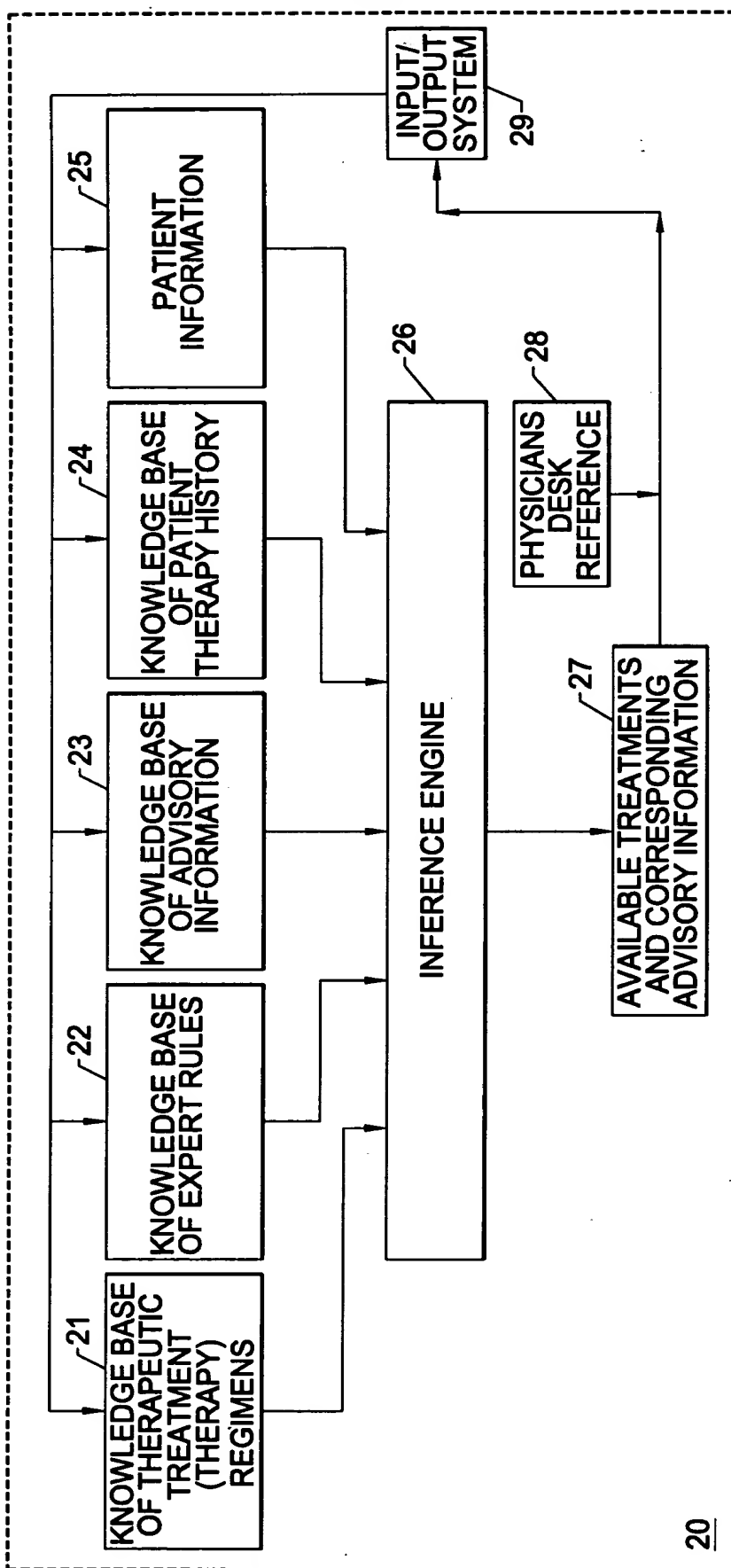
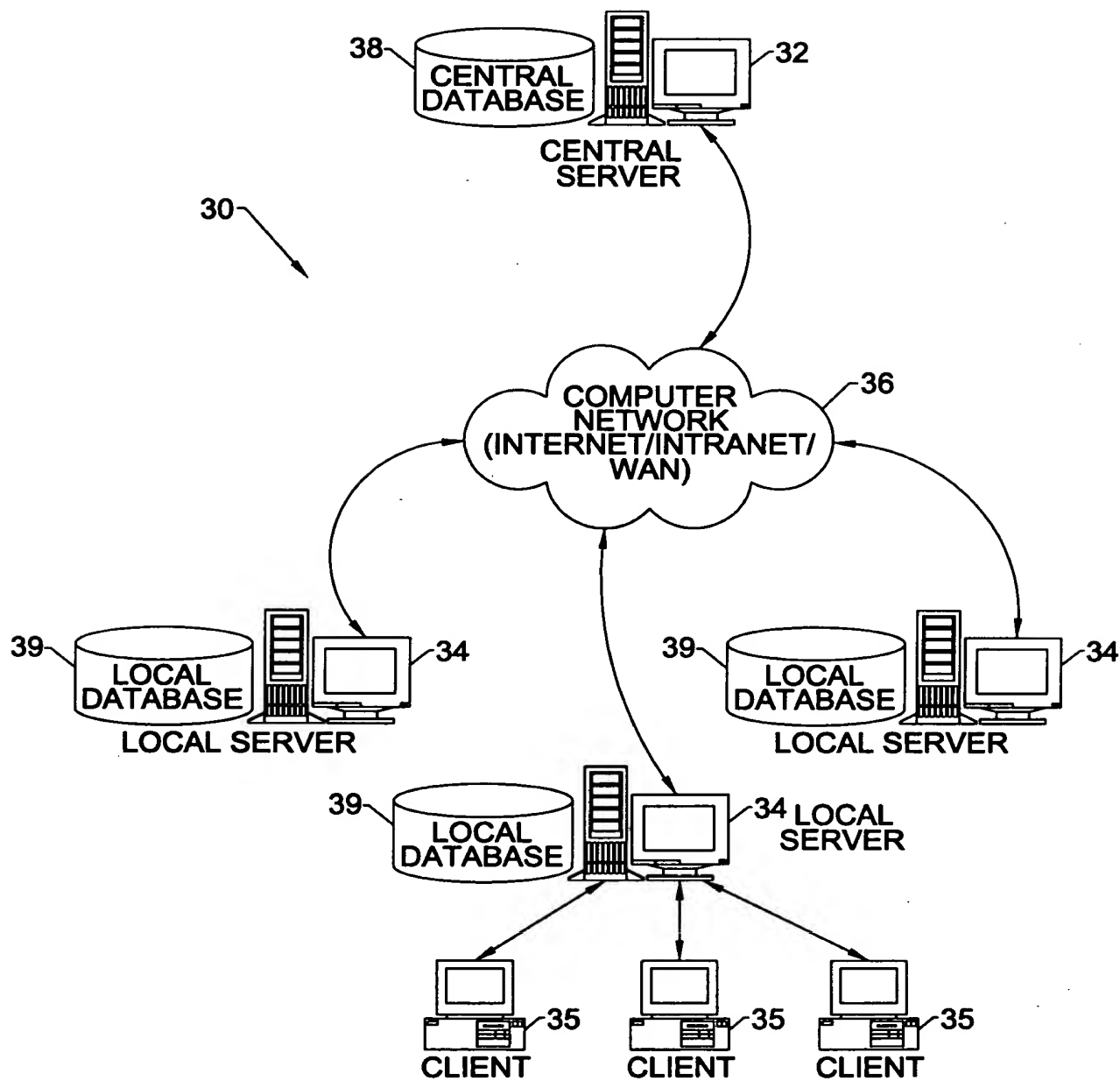


FIG. 1.

**FIG. 2.**

**FIG. 3.**

50

54

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56

57

50a 60a 70a 51 52 53

TPMS Patient

Medical History | Chart | Therapy Evaluation

General

Patient Id: TPMS Number: ☐ Entry Date Value

Birth Date: Gender: Weight (kg) + H Can Take Solid Dosage + H

CD4 and Viral Load

Specimen Date Value Specimen Date Prev Value

(cells/cubic mm) + H (copies/ml) + H

HIV Genotype + H **Phenotype** + H **ARV Allergy** + H **Intolerance** + H

Hemoglobin + H **Neuropathy** + H **Pancreatitis** + H

Neutrophils + H **Neutropenia** + H

Hepatic Function + H **Renal Function** + H

Specimen Date AST/SGOT (IU/L) ALT/SGPT (IU/L) Specimen Date Serum Creatinine Est. Creatinine

AIDS and Viral Load

AIDS Diagnosis + H **AIDS Defining Event** + H

Date **Current ARV Therapy** + X H

Non-Arv Drugs + X H

Therapy Drug Start Date

FIG. 4.

FIG. 5.

71

60a

72

70a

75

70

TPMS Patient

Medical History | Chart | Therapy Evaluation

Evaluate Current Therapy

AZT, 3TC, IDV

Show 1-Drug Therapies

Show 2-Drug Therapies

Show 3-Drug Therapies

Show 4-Drug Therapies

Show Rejected Therapies

Show EAP Therapies

Therapy Options (10 of 17)

Therapy

Eff.

Aq.

Safety Considerations

Med

Drug

Freq.

Pills

Cost

△ AZT, d4T, NFV	2	2	ddI Renal dos Adj, d4T Renal dos Adj	Y		qdh	15	\$30.38
△ ddI, d4T, IDV	3	6	ddI Renal dos Adj, d4T Renal dos Adj, IDV Renal d...	Y		qdh	12	\$26.80
△ ddI, d4T, RTV	4	7	ddI Renal dos Adj, d4T Renal dos Adj	Y		q12h	18	\$34.06
△ d4T, SQV-SGC, NFV	5	8	d4T Renal dos Adj	Y		qdh	29	\$45.60
○ ddI, SQV-SGC, NFV	5	8	ddI Renal dos Adj			qdh	31	\$42.24
△ ddC, SQV-SGC, NFV	5	8	ddC Renal dos Adj, tobramycin+ddC		Y	qdh	29	\$42.72
△ ddC, d4T, NFV	8	8	ddC Renal dos Adj, d4T Renal dos Adj, tobramycin+...	Y	Y	qdh	13	\$30.86
△ ddI, d4T, SQV-SGC	6	9	ddI Renal dos Adj, d4T Renal dos Adj	Y		qdh	24	\$31.24

See More

See All

Top 10

☒ Full Screen Evaluation

Antiretroviral Drugs

Clear All Drugs

Nucleoside Analogues (NRTI)

① AZT (Retrovir/Zidovudine)

② ddI (Videx/didanosine)

③ ddC (Trizivir/zalcitabine)

④ 3TC (Extivina/lamivudine)

⑤ d4T (Zeritavudine)

⑥ ABC (Zagtenabacavir)

Protease Inhibitors (PI)

⑦ IDV (Crivarin/indinavir)

⑧ SQV-HGC (Invirase/saquinavir)

TO FIG. 6B.

FIG. 6A.

FROM FIG. 6A.

<p>Therapy Being Evaluated</p> <div style="border: 1px solid black; padding: 5px; min-height: 100px;"></div>	<p>< Use as Current Therapy</p>
<p>Recommended Dosages</p> <ul style="list-style-type: none"> Videx 125mg q 12h (4 pills/day, \$4.22/day) Zenit 15mg q 12h (2 pills/day, \$7.58/day) Crixivan 800 mg q 8h (6 pills/day, \$15.00/day) <p>(☞ indicates adjusted dosage)</p>	
<p>Warning - Resistance Notices</p> <ul style="list-style-type: none"> d4T: Resistance Advisory: Cross Resistance: The patient has at least one previous exposure to AZT that was greater than one year in duration. Previous AZT exposure can lessen the antiRetroviral effect of d4T due to cross resistance. Therapies containing d4T have been ranked lower in their AdjustedScore by +3. Resistance advisory: IDV: According to the last genotype data entered, the patient's virus currently has the following secondary mutation(s), [L101P], [54V/P] and [I84V/P] which is/are associated with resistance to IDV. These mutations alone are not enough to preclude the use of IDV but they do indicate a trend in this direction. IDV is still an option but ongoing IDV use may result in a more rapid emergence of complete resistance. The Adjusted Score of IDV has been lowered by +3. 	

FIG. 6B.

Icon	Meaning
○	Indicates that there were no critical alerts for the therapy, however, general warnings and advisories should be read in the Therapy Details box.
ⓘ	Indicates that there were no critical alerts for the therapy, however, general warnings and advisories should be read in the Therapy Details box. The book indicates that therapy has been studied and a reference is available to review.
△	Indicates a yellow alert. There is important information about this therapy that must be reviewed.
⚠	Indicates a yellow alert. There is important information about this therapy that must be reviewed. The book indicates that therapy has been studied and a reference is available to review.
!	Indicates a red alert, which means critical and possible life-threatening situation may exist or may be created with this therapy. Information in the Therapy Details section must be read for this therapy to be considered.
! ⓘ	Indicates a red alert, which means critical and possible life-threatening situation may exist or may be created with this therapy. Information in the Therapy Details section must be read for this therapy to be considered. The book indicates that therapy has been studied and a reference is available to review.
X	Indicates the therapy is not recommended.

FIG. 7.

73a 73b 78

TPMS Patient Medical History Chart Therapy Evaluation

Therapy Being Evaluated AZT, ddI, SQV, RTV

< Use as Current Therapy Show Therapies

73c STOP! - DRUG INTERACTION RED ALERT - STOP!!!

Read the following Red Drug Contra-Indication Alerts for this therapy:

Drug Interaction Alert: Patient is currently taking cisapride, co-administration of Norvir (Ritonavir/RTV) with certain non-sedating antihistamines, sedative hypnotics, or antiarrhythmics may result in potentially serious and/or life-threatening adverse events due to possible effects of Norvir (Ritonavir/RTV) on the hepatic metabolism of certain drugs. Norvir (Ritonavir/RTV) can produce large increases in plasma concentrations of certain highly metabolized drugs. Norvir (Ritonavir/RTV) should not be coadministered with alprazolam, amiodarone, astemizole, bepridil, bupropion, cisapride, clozapine, diazepam, encainide, estazolam, flecainide, flurazepam, mependine, midazolam, piroxicam, propafenone, propoxyphene, quinidine, rifabutin, terfenadine, triazolam or zolpidem. Patient is taking cisapride and in order to use this therapy, that drug should be replaced with a non-contraindicated substitute. CmtDIL, Commentary25

73d Dosages

- Retrovir 300mg q1 2h (2 pills/day, \$9.56/day)
- Videx 125mg q1 2h (4 pills/day, \$4.22/day)
- Inivase 400mg q1 2h; taken within 2 hours after a full meal (4 pills/day, \$8.47/day)
- Norvir 400mg q1 2h (8 pills/day, \$14.94/day)

(C indicates adjusted dosage)

73e Dosage Adjustments: The following dosage adjustments messages apply to this therapy:

- Dosage Notice: This therapy contains both saquinavir and ritonavir. When ritonavir and saquinavir are used together the dosage of each drug is reduced by 1/3. The dosage for these drugs has been set accordingly. DosComD, Commentary28

73f Inivase (saquinavir/SQV): The following Warnings and Advisories apply to Inivase (saquinavir/SAQ);

- Drug Interaction Information: Compounds that are substrates of CYP3A4 (e.g., calcium channel blockers, clindamycin, dapsone, quinidine, triazolam) may have elevated plasma concentrations when coadministered with Inivase (saquinavir/SQV); therefore, patient should be monitored for toxicities associated with such drugs when taking Inivase (saquinavir/SQV). CmtGenF, Commentary21

73g

FIG. 8.

70

76

Therapy Options

Therapy	Eff.	Adj.	Safety
<input type="checkbox"/> d4T, 3TC, IDV	1	1	
<input type="checkbox"/> AZT, 3TC, IDV	1	1	
<input type="checkbox"/> d4T, 3TC, NFV	1	1	
<input type="checkbox"/> AZT, 3TC, NFV	1	1	
<input type="checkbox"/> d4T, 3TC, NFV			
<input type="checkbox"/> AZT, 3TC, NFV			
<input type="checkbox"/> ddI, d4T, 3TC			
<input type="checkbox"/> d4T, 3TC, NFV			

90

Therapy B Evaluated

General

- Vi
- M

Show Abstract for Retrovir

Show Abstract for EpiVir

Show Abstract for Viracept

Show Therapy Study

Print Details for AZT, 3TC, NFV

Print Top 10 Therapy Option Details

Hide Column "Eff."

Hide Column "Adj."

Hide Column "Safety Considerations"

Show Column "Med"

Show Column "Drug"

Hide Column "Freq."

Hide Column "Pills"

Hide Column "Cost"

FIG. 9.

FIG. 10A.

FIG. 10B.

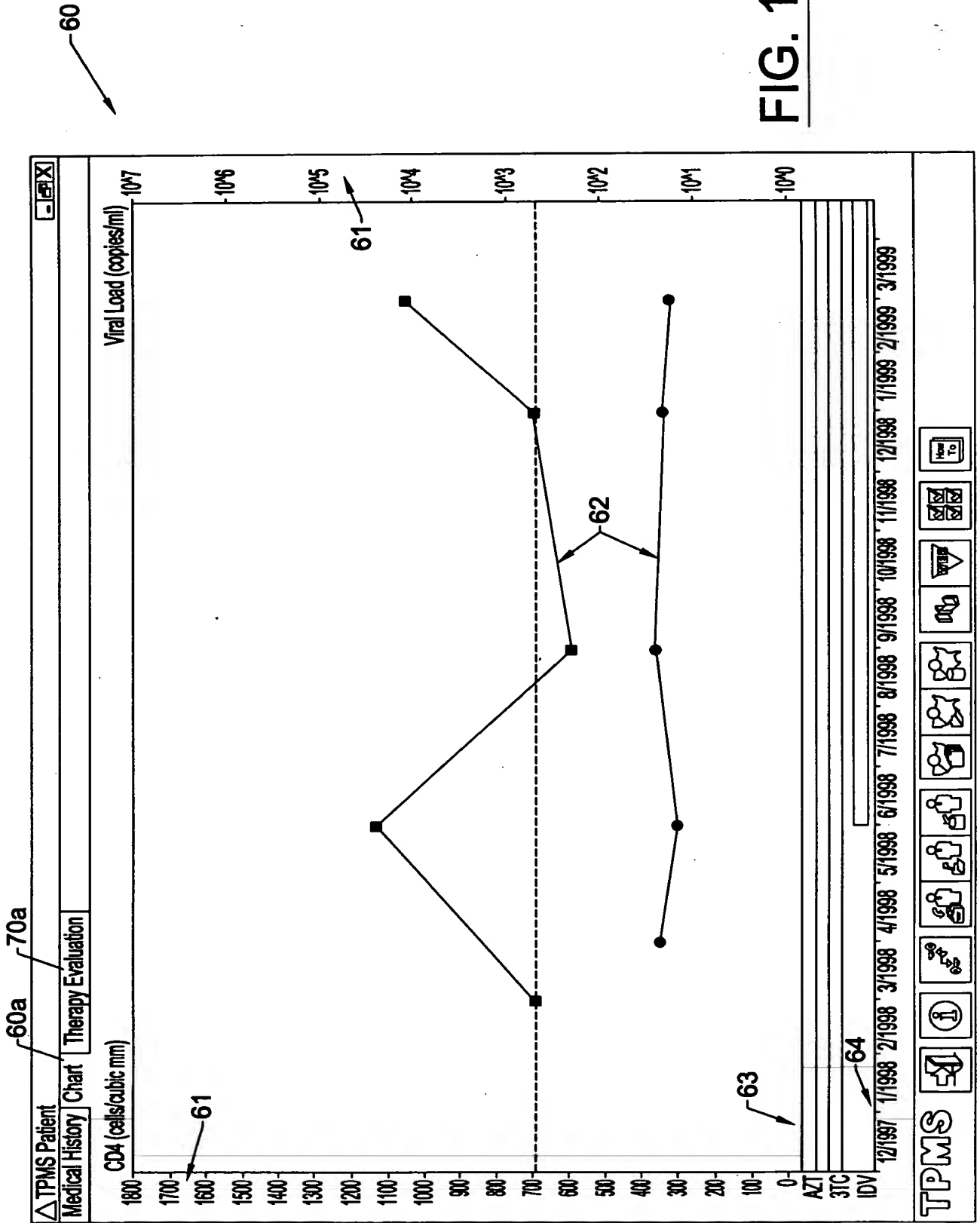


FIG. 10C.

FIG. 10D.

FIG. 11A.

FIG. 11B.



Recommended Dosages

- Retrovir 300mg q 12h (2 pills/day, \$9.56/day)**
Videx 200mg q 12h (4 pills/day, \$6.78/day)
Norvir 600 mg q 12h (12 pills/day, \$22.26/day)
Rescriptor 400mg q 8h (12 pills/day, \$7.39/day)

Warnings and Side Effects

- AZT: Interrupt Retrovirus if anemia and/or neutropenia develops. More Info 036 [DoseGenA, Commentary36](#)
- ddI: When treatment with other drugs known to cause pancreatic toxicity is required (for example, IV pentamidine), suspension of Videx should be considered. [CmtGenA, Commentary13](#)
- ddI: If patients develop symptoms of neuropathy, Videx therapy should be interrupted. [DoseGenB, Commentary40](#)
- ddI: Clinical signs suggestive of pancreatitis should prompt dose suspension of Videx and careful evaluation of the possibility of pancreatitis. Only after pancreatitis has been ruled out should dosing be resumed. [DoseGenB, Commentary39](#)
- DLV: Skin rash attributable to Rescriptor may occur during first 21 days. More Info 054 [CmtGenS, Commentary54](#)

Drug Interaction Information

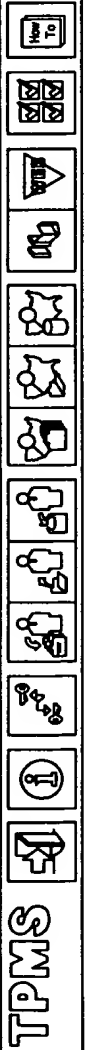
- ddi: Videx should not be administered with a prescription antibiotic containing any form of tetracycline. [CmtGenA, Commentary15](#)
- ddi: Plasma concentrations of some quinolone antibiotics are decreased when administered with antacids containing magnesium or aluminum. Therefore, doses of quinolone antibiotics should not be administered within 2 hours of taking Videx. [CmtGenA, Commentary16](#)
- RTV: Monitor for decreased AUC of Norvir and associated adverse events when concomitant with use of drugs that increase CYP3A activity (including tobacco). More

Info 026 CmttGenH, Commentary26

FIG. 11D.

TPMS Patient		Therapy Evaluation	
Medical History Chart		<input type="checkbox"/> Show 1-Drug Therapies <input checked="" type="checkbox"/> Show 3-Drug Therapies <input type="checkbox"/> Show Rejected Therapies <input type="checkbox"/> Show 2-Drug Therapies <input checked="" type="checkbox"/> Show 4-Drug Therapies <input type="checkbox"/> Show EAP Therapies	
[Evaluate Current Therapy?]		None	
Therapy Options (10 of 613)			
Therapy	Show Abstract for Retrovir	Freq.	Pills
<input checked="" type="radio"/> AZT, ddI, 3TC, SQV-S	Show Abstract for Virex	qdh	26
<input type="radio"/> ddI, 3TC, NFV	Show Abstract for Edmiv	qdh	13
<input checked="" type="radio"/> AZT, 3TC, IDV	Show Abstract for Fortovase	qdh	10
<input checked="" type="radio"/> AZT, 3TC, NFV	Show Therapy Study	qdh	13
<input checked="" type="radio"/> ddI, 3TC, IDV	Print Details for AZT, ddI, 3TC, SQV-SGC	qdh	10
<input type="radio"/> AZT, ddI, RTV, DLV	Print Top 10 Therapy Option Details	qdh	30
<input type="radio"/> ddI, ddI, IDV, NVP	Print All Therapy Option Summaries	qdh	17
<input type="radio"/> ddI, 3TC, RTV	Print Top 10 Therapy Option Summaries	qdh	16
<input type="radio"/> AZT, ddI, RTV, NVP	Hide Column "Eff."	qdh	20
See More	Hide Column "Adj."		
Therapy Being Evaluated	Hide Column "Safety Considerations"		
General Message	Show Column "Med"		
	Show Column "Drug"		
	Hide Column "Freq."		
	Hide Column "Pills"		
	Hide Column "Cost"		
<p>Antiretroviral Drugs Clear All Drugs</p> <p>Nucleoside Analogs (NRTI)</p> <p><input type="checkbox"/> AZT (Retrovir/zidovudine)</p> <p><input type="checkbox"/> ddI (Virex/ddanosine)</p> <p><input type="checkbox"/> ddC (Hivid/zalcitabine)</p> <p><input type="checkbox"/> 3TC (Epivir/lamivudine)</p> <p><input type="checkbox"/> ddT (Zerit/stavudine)</p> <p><input type="checkbox"/> ABC (Ziagen/abacavir)</p> <p>Protease Inhibitors (PI)</p> <p><input type="checkbox"/> IDV (Crixivan/indinavir)</p> <p><input type="checkbox"/> SQV-HGC (Invirase/saquinavir)</p> <p><input type="checkbox"/> SQV-SGC (Fortovase/saquinavir)</p> <p><Use as Current Therapy</p>			
<p>WARNING: Before initiating any antiretroviral treatment regimen, the complete product information for each therapeutic component should be consulted.</p> <p>Viral Load Testing Required: Viral load testing should be repeated 21-35 days after initiation of, or a change of, antiretroviral therapy to evaluate therapeutic efficacy and patient compliance. CmtGenY, Commentary65</p> <p>Therapy Initiation/Change Messages</p> <p>Therapy Initiation: Current treatment guidelines recommend initiation of antiretroviral therapy for HIV-infected patients with HIV RNA (viral load) concentrations greater than 20,000 copies/ml (10,000 Eq/ml bDNA) or CD4 counts less than 500 cells/ul. (Ann.Int.Med., 1998), PreQualM, Commentary61</p> <p>Combination Therapy Recommended: Experts agree that the goal of antiretroviral therapy should be to reduce the viral load to as low a level as possible for as long as possible. Initiation of therapy with a combination containing 2 nucleoside reverse transcriptase inhibitors (NRTIs) and a potent protease inhibitor have been shown to provide enhanced clinical benefit versus 2 drug combinations with regard to reduction in viral load and improved clinical outcomes. PreQualM, Commentary66</p>			

FIG. 11E.



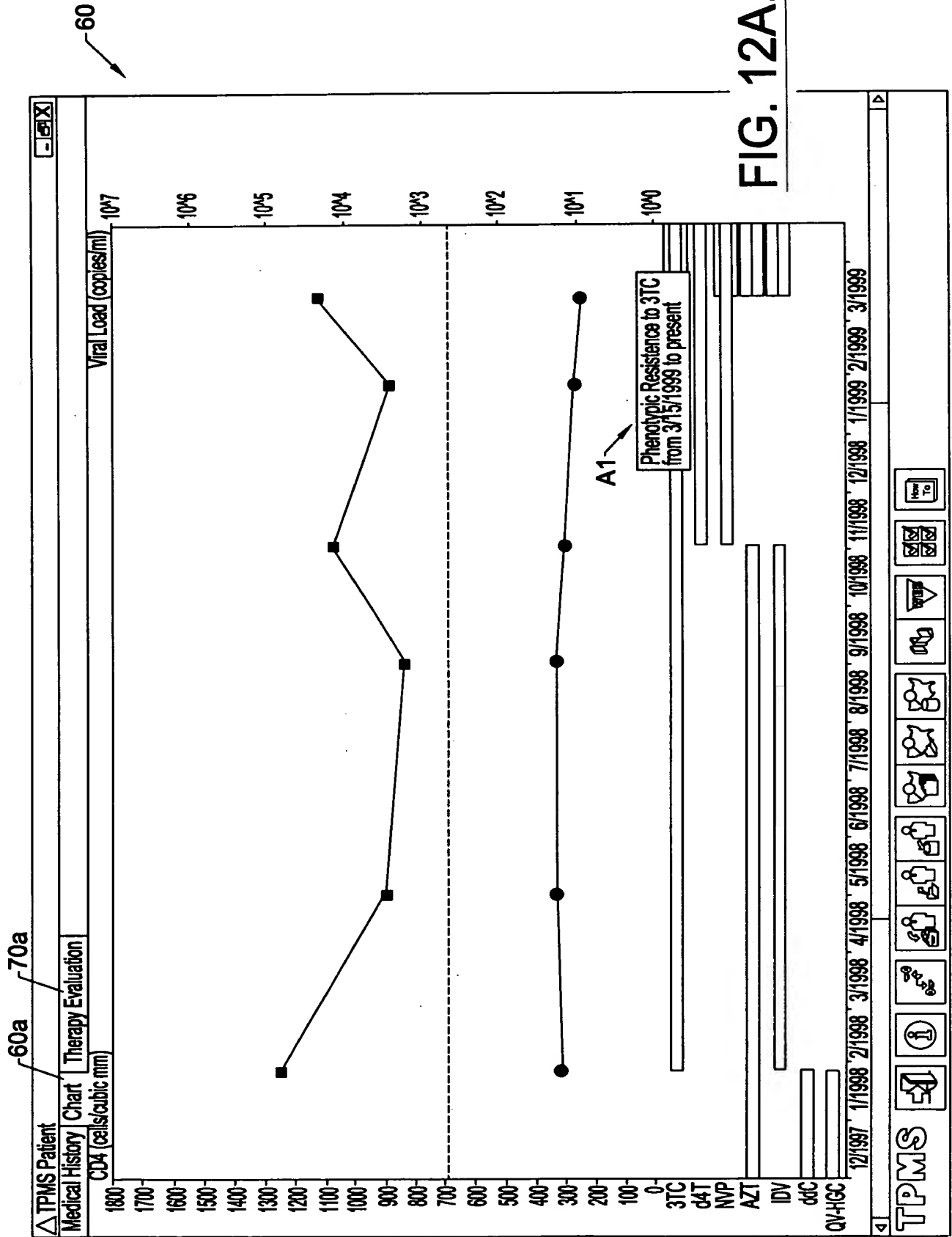


FIG. 12A.

TPMS Patient

Medical History Chart Therapy Evaluation

Evaluate Current Therapy

3TC, d4T, NVP

Show 1-Drug Therapies Show 3-Drug Therapies Show Rejected Therapies Show 2-Drug Therapies Show 4-Drug Therapies Show EAP Therapies

Therapy Options (10 of 98)

Therapy	Eff.	Adj.	Safety Considerations	Freq.	Pills	Cost
2 ddI, d4T, NVP	2	2	Rifabutin+NVP	qdh	15	\$33.88
5 ddI, d4T, EFV	5	5		qdh	9	\$28.44
5 ddI, NVP, EFV	5	5	Rifabutin+NVP	qdh	16	\$38.50
5 d4T, NVP, EFV	5	5	Rifabutin+NVP	qdh	14	\$40.24
5 ddC, NVP, EFV	5	7	Rifabutin+NVP	qdh	15	\$38.77
5 ddC, d4T, EFV	5	7		qdh	8	\$28.71

76

See More See All Top 10 Full Screen Evaluation

Therapy Being Evaluated

3TC, d4T, NVP

<Use as Current Therapy

Antiretroviral Drugs

Clear All Drugs

Nucleoside Analogues (NRTI)

Protease Inhibitors (PI)

Therapy Rejected

!!!THERAPY REJECTED!!!

This therapy was rejected for the following reason(s) Additional information about the therapy is provided but this therapy is NOT advisable

- Viramune (nevirapine/NVP) Resistance Advisory: According to the last genotype data entered, the patient's virus currently has mutation(s) which is/are associated with resistance to Viramune. FitMutE, Rejection54
- Resistance Advisory: According to the last genotype data entered, the patient's virus currently has the following mutations: M184V [RT], the genotype test displays evidence of the M184V/M184I mutation which is associated with resistance to 3TC. However, this mutant has increased sensitivity to the antiretroviral activity of AZT and ADV so an AZT/3TC or AZT/ADV combination is still useable. Therefore combinations which contain AZT/3TC and AZT/ADV are shown as therapy options although these therapies have been ranked down +5 in favor of three drug combinations with no resistant mutants. FitMutB, Rejection51
- Efavir and Viramune Resistance Advisory: The patient's last phenotypic assay demonstrates phenotypic resistance to Efavir and Viramune, therefore, therapies containing Efavir and Viramune are not recommended at this time. FitResC, Rejection42

CAUTION YELLOW ALERT CAUTION

W3

Drug Interaction Alert: Patient is currently taking rifabutin and there is insufficient data to assess whether dose adjustments are necessary. These drugs

TPMS

Icons

FIG. 12B.

A2

TPMS Patient		Medical History Chart Therapy Evaluation	
[General]	<input type="checkbox"/> + <input checked="" type="checkbox"/> H <input type="checkbox"/> Entry <input checked="" type="checkbox"/> Comment PopUp	Date	Value
Patient Id: Features1	Birth date: 1/1/1960	Weight (kg)	160.00
Physician: [patient]	Gender: Male	Solid Dosage	Yes
		Print	Save
CD4 and Viral Load			
Specimen Date	Value	Specimen Date	Prev Value
+ H 3/15/1999	240	1/28/1999	265
Current Viral Load			
+ H 3/15/1999	21500	VL Units:	C/mL
Previous Viral Load			
1/28/1999	2600	VL Units:	C/mL
HIV Genotype			
+ H 3/15/1999	L10(P), M46(P), I54(VP), V62A(P), M41(LRT), Y181		
<p>Ph • NVPΔ : Drug Interaction Alert: Patient is currently taking rifabutin and there is insufficient data to assess whether dose adjustments are necessary. These drugs should only be used in combination if clearly indicated and with careful monitoring. CmtDIP, Commentary33</p> <p>AJ</p> <p>In</p>			
Hemoglobin			
Specimen Date	Value(g/dL)	Date	Value
+ H 1/28/1999	15.00	+ H 1/28/1999	No
Neutrophils			
Specimen Date	cels/cubic mm	Date	Value
+ H 1/28/1999	1500	+ H 1/28/1999	No
Hepatic Function			
Specimen Date	AST/SGOT (IU/L)	AL/TSGPT (IU/L)	Renal Function
1/28/1999	25	25	+ H
Specimen Date		Dialysis	Est Creatinine
1/28/1999	25	No	08.17
AIDS Diagnosis			
Date	AIDS Defining Event		
11/4/1998	3TC d4T,NVP	54c	
Non-ARV Drugs			
Start Date			
5/1/1999	W3		
5/1/1999			
5/1/1999			